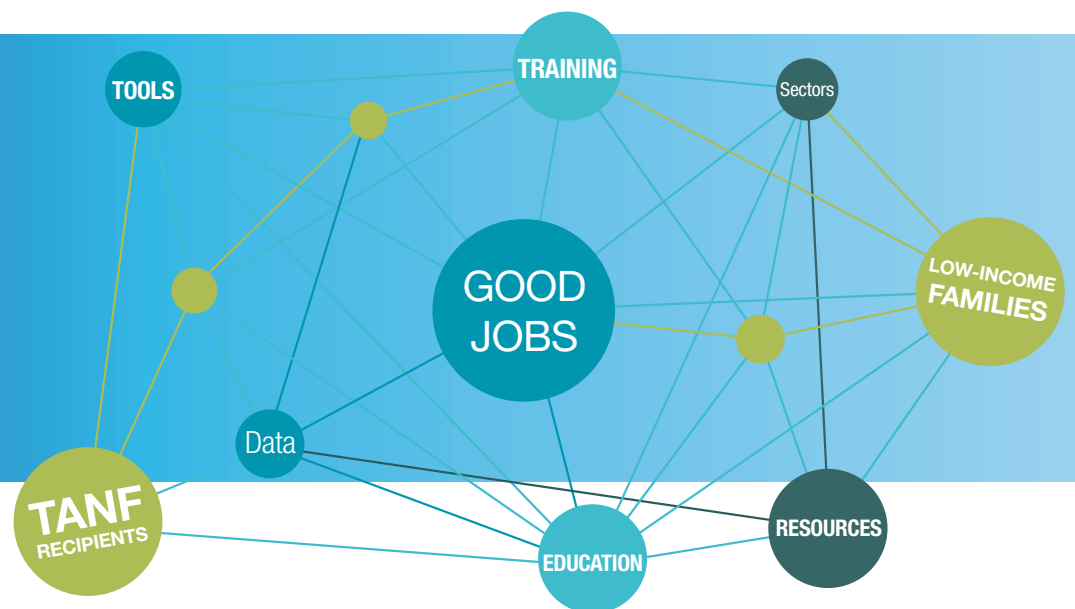


# Promising Occupations Achievable through Short-term Education or Training for Low-Income Families: Introduction



# Promising Occupations Achievable through Short-term Education or Training for Low-Income Families: Introduction

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OPRE Report 2015-111

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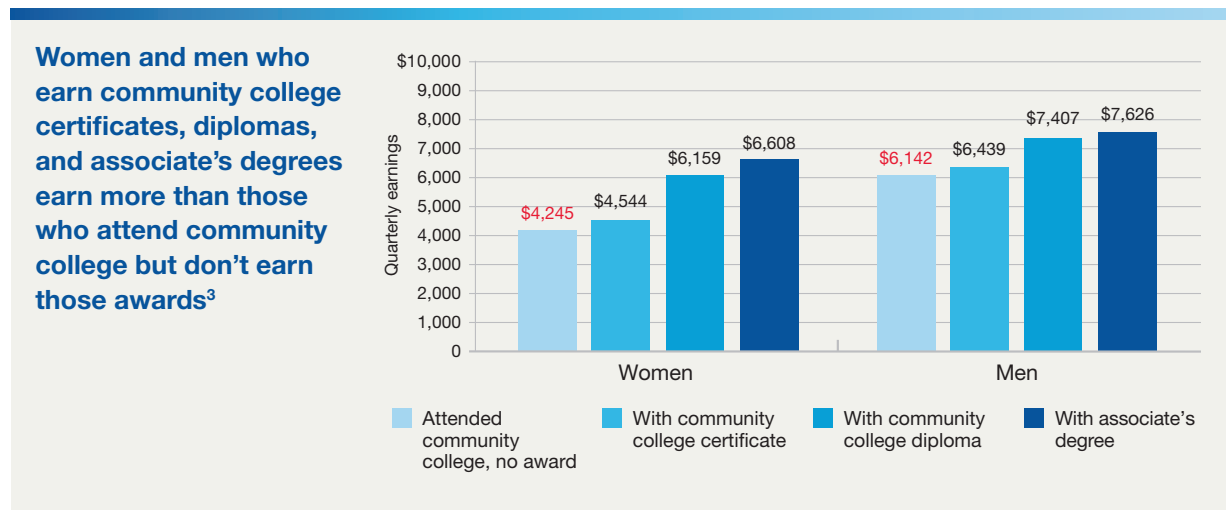
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## INTRODUCTION

Promising careers are available to TANF recipients and other low-income workers with a relatively short-term investment in education and training. Almost all states offer estimates—called projections—of how occupations will grow over a 10-year period. When paired with data on the education and training required for each occupation, as well as earnings potential and the number of jobs available per year, these data paint a picture of the jobs that will be available in the future, the credentials they will require, and how much workers might expect to earn by pursuing them.

## THE IMPORTANCE OF EDUCATION AND TRAINING

- By 2020, 65 percent of all jobs will require some education or training beyond a high school diploma, compared with 59 percent of jobs in 2010. This percentage has been growing over time and shows no signs of declining.<sup>1</sup>
- Recent research shows that community college certificates, diplomas, and associate's degrees improve employment and earnings, particularly for women.<sup>2</sup>



Clearly, education and/or training beyond a high school diploma are critical to success in the modern labor market. Challenges to increasing the number of low-income workers who can take part in such educational activities include lack of affordability, lack of adequate preparation, and juggling school along with employment or family responsibilities.<sup>4</sup>

## **OPPORTUNITIES**

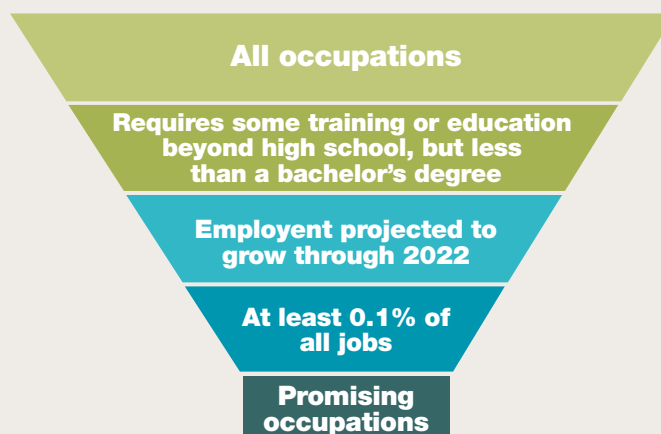
The recently passed Workforce Innovation Opportunity Act increases the complementarities between workforce development and TANF agencies by prioritizing training funds for low-income workers, requiring co-location of workforce system providers and TANF agencies, and encouraging shared performance management systems. These changes could provide opportunities for TANF agencies and their workforce partners to collaborate more closely and to leverage their resources to enhance the services provided to all clients. There is a lot of room to enhance the educational attainment of TANF recipients and low-income families: only about one-third of low-income workers with families and less than 6 percent of TANF recipients have more than a high school diploma.<sup>5, 6</sup> The challenge is to determine which education and training opportunities will really pay off for those who pursue them.

## **WHAT WE DID**

We used data from state occupational employment projections to determine the promising occupations in each state that could be attainable with some education or training beyond high school. State-level projections are available for the 50 states, District of Columbia, and Puerto Rico on ProjectionsCentral.com.<sup>7</sup> They include both the employment projections and the entry-level education and training requirements for each occupation according to O\*NET. First, we determined which occupations required more than a high school diploma or GED, but less than a bachelor's degree (Exhibit 1). The idea was to focus on occupations that could be accessed with a year or less of education or training.<sup>8</sup> Next, among those occupations, we focused on the ones projected to experience positive job growth through 2022. (We defined positive job growth in terms of new openings, not just replacing people who retire or otherwise leave the occupation, to eliminate shrinking or stagnating occupations.) Finally, we limited our list to occupations expected to have at least 1 job per 1,000 jobs statewide. This was to make sure there would be a sufficient number of jobs available, relative to the size of the state's labor market.

For each state, we created a table highlighting the promising occupations in order from those with the highest to the lowest number of projected annual jobs. The tables show the education and training required (some college, no degree; postsecondary certificate; associate's degree), annual job openings, growth rates, and key wage percentiles for all the occupations that meet our criteria. Based on the information available, we cannot predict exactly how much individuals will be able to earn at each step of their career. However, comparing wages at different percentiles is a reliable gauge of how earning potential would

## Exhibit 1. Summary of what we did



likely change if a worker went from a relatively low level of experience and compensation compared with others in an occupation, to an average or high level of experience and compensation. For each state and the United States as a whole, we present the 25th percentile, median, and 75th percentile annual wages; we consider the 25th wage percentile to be a good indicator of an approximate entry-level wage and the 75th percentile to be an indicator of wages earned with significant on-the-job experience.

## HOW TO USE THIS INFORMATION

TANF administrators could use this information to focus their states' work activity resources on education and training programs in growing fields, and avoid programs in shrinking fields. TANF clients and other low-income workers could use the information to focus on pursuing short- and long-term education and training for jobs that fit with their skills, interests, and abilities, are likely to have openings, and also provide a pathway to self-sufficiency. The occupations highlighted in this brief provide a starting point for these decisions. Combining the promising occupations with information on job characteristics and working conditions, such as data from O\*NET (available at [www.onetonline.org](http://www.onetonline.org)), can make the information even more valuable.

## HOW TO INTERPRET THE TABLES

Page 5 presents the table for the United States; we use this as an example of how to interpret the information in the tables. Each row in the table presents an occupation that meets the criteria described above for promising occupations. The list of occupations is arranged from the highest to the lowest number of projected annual openings. Next to each occupation

name, the table presents the education and, if applicable, the on-the-job training (OJT) required for the occupation; reading down the table, you can compare the projected openings, growth, and wages of occupations with the same amount of required education and training by looking at the rows with the same number of diploma and OJT icons. The far-right column of the table presents the income distributions, anchored at the median reported wage, which is listed in the blue bar. The width of the blue bar indicates the spread from the 25th percentile, through the median, to the 75th percentile. The relative positions of the blue bars show which occupations have higher wages and potential for wage growth: those to the left of the other occupations have low wages and/or low wage growth, whereas those to the right have higher wages and wage growth potential.

As an example, consider the occupation with the most projected annual openings through 2022—registered nurses. At the 25th percentile of the wage distribution, which is a rough approximation for what an entry-level job would pay, registered nurses earn \$54,620. The median wage is \$66,640, which means half of registered nurses earn above that amount and half earn below that amount. We think of this as what a registered nurse could expect to earn mid-career. At the 75th percentile, registered nurses earn \$81,080; we think of this as what a registered nurse with considerable experience could expect to earn. Looking down the table, we can see that the blue bar for registered nurses is to the right of virtually every other occupation in the table; thus, registered nursing is attractive as a career not only because it is expected to have the most annual vacancies, but because it offers strong wages relative to the other career possibilities.

Although many of the occupations identified in the table have strong entry-level wages and the potential for notable wage growth with increased experience, some provide a quicker path to self-sufficiency than others. For example, teacher assistants at the 25th percentile make \$19,610 per year. Even with more experience, teacher assistants only make \$30,670 at the 75th percentile. Nursing assistants follow a similar pattern. For comparison, the 2015 federal poverty guideline for a family of one adult and two children is \$20,090. Thus, some occupations that are promising for their growth and short-term education and training requirements don't necessarily pay wages that will quickly lift families out of poverty. However, many of them have low barriers to entry (for example, they require only a postsecondary certificate), favorable working conditions including benefits or part-time employment options, and could be worth pursuing as a first step in a career pathway (such as from nursing assistant to licensed practical nurse and/or registered nurse). People can combine the information in the table with information on working conditions from O\*NET (available at [www.onetonline.org](http://www.onetonline.org)) to help determine whether they would be a good match for a particular job.<sup>9</sup>



# PROMISING OCCUPATIONS IN United States


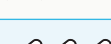
EDUCATION/  
TRAINING  
REQUIRED


AVERAGE  
ANNUAL  
OPENINGS


GROWTH  
RATE


## 2014 ANNUAL WAGE

25th Percentile Median 75th Percentile

Registered nurses		105,260	19.4%	\$54,620	<b>\$66,640</b>	\$81,080
Nursing assistants		59,360	21.1%	\$21,340	<b>\$25,100</b>	\$30,020
Heavy and tractor-trailer truck drivers	 + OJT	46,470	11.3%	\$32,000	<b>\$39,520</b>	\$49,410
Teacher assistants		38,260	8.6%	\$19,610	<b>\$24,430</b>	\$30,670
Licensed practical and licensed vocational nurses		36,310	24.8%	\$35,780	<b>\$42,490</b>	\$49,450
Medical assistants		26,990	29.0%	\$25,500	<b>\$29,960</b>	\$36,070
Hairdressers, hairstylists, and cosmetologists		22,060	12.7%	\$18,680	<b>\$23,120</b>	\$32,170
Preschool teachers, except special education		19,940	17.4%	\$22,010	<b>\$28,120</b>	\$37,660
Computer user support specialists	 + OJT	19,690	20.2%	\$36,610	<b>\$47,610</b>	\$62,050
Dental assistants		13,720	24.5%	\$29,260	<b>\$35,390</b>	\$42,810
Heating, air conditioning, and refrigeration mechanics and installers	 + OJT	12,370	20.9%	\$34,610	<b>\$44,630</b>	\$57,500
Emergency medical technicians and paramedics		12,060	23.1%	\$25,170	<b>\$31,700</b>	\$41,780
Dental hygienists		11,350	33.3%	\$59,890	<b>\$71,520</b>	\$85,240
Firefighters	 + OJT	10,400	6.6%	\$31,340	<b>\$45,970</b>	\$61,950
Paralegals and legal assistants		9,120	16.7%	\$37,550	<b>\$48,350</b>	\$62,000
Medical records and health information technicians		9,040	22.1%	\$28,250	<b>\$35,900</b>	\$46,640
Medical and clinical laboratory technicians		9,020	29.7%	\$30,860	<b>\$38,370</b>	\$48,470
Radiologic technologists		6,960	20.8%	\$45,280	<b>\$55,870</b>	\$68,420
Computer network support specialists		3,960	6.9%	\$46,220	<b>\$61,830</b>	\$81,800
Telecommunications equipment installers and repairers, except line installers	 + OJT	3,820	3.9%	\$39,450	<b>\$55,190</b>	\$69,450

 = some college, no degree

 = post-secondary non-degree award

 = associate's degree

**OJT** = on-the-job training

## ENDNOTES

<sup>1</sup> Carnevale, Anthony P., Nicole Smith, and Jeff Strohl. “Recovery: Projections of Jobs and Education Requirements through 2020.” Washington, DC: Georgetown Public Policy Institute, Center on Education and the Workforce, June 2013.

<sup>2</sup> Jepsen, Christopher, Kenneth Troske, and Paul Coomes. “The Labor-Market Returns to Community College Degrees, Diplomas, and Certificates.” *Journal of Labor Economics*, vol. 32, no. 1, 2014, pp. 95–121.

<sup>3</sup> Community college certificates typically require one or two semesters of course work and are primarily awarded in technical programs such as automotive mechanic. Diplomas typically require more than a year of study and are primarily awarded in technical fields, such as accounting and practical nursing. Associate’s degrees typically require two years of study and are awarded in a number of humanities, business, and social science fields.

<sup>4</sup> See <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/412564-Facilitating-Postsecondary-Education-and-Training-for-TANF-Recipients.PDF>.

<sup>5</sup> Acs, Gregory, and Austin Nichols. 2007. “Low-Income Workers and Their Employers: Characteristics and Challenges.” Washington, DC: The Urban Institute, 2007. Available at <http://www.urban.org/url.cfm?ID=411532>.

<sup>6</sup> See [http://www.acf.hhs.gov/sites/default/files/ofa/tanf\\_characteristics\\_fy\\_2012.pdf](http://www.acf.hhs.gov/sites/default/files/ofa/tanf_characteristics_fy_2012.pdf).

<sup>7</sup> Some states’ labor agencies post projections by region and/or metropolitan area on their websites. Where projections at the sub-state level are available, TANF agencies and clients can use it to tailor their efforts even more closely to local conditions.

<sup>8</sup> We did this because, at the time of this writing, federal TANF regulations limit the amount of time states can count training and education activities towards the state TANF work participation rate to twelve months. We included associate’s degrees because (1) there are other widely available sources of funding, such as Pell grants and WIA Adult program training funds, to support an additional year of funding beyond what can be covered by TANF funding and (2) many such degrees are offered in compressed schedules that can be completed in 12 months.

<sup>9</sup> Readers can also see Appendix D of the “Resources for Connecting TANF Recipients and Other Low-Income Families to Good Jobs” report for additional career exploration resources.

